

WHAT IS CLAIMED IS:

1. A method of introducing ink in an ink-jet recording apparatus comprising an ink-jet printing head which ejects, to a recording medium, the ink through nozzles thereof, said method comprising the steps of:

a first ink-introducing step of initially introducing a first ink into said ink-jet printing head when said ink-jet printing head is initially used, said first ink having a first degree of deaeration; and

a second ink-introducing step of subsequently introducing a second ink into said ink-jet printing head after said first ink-introducing step, said second ink having a second degree of deaeration, which is lower than said first degree of deaeration.

2. The method according to claim 1, wherein said ink-jet recording apparatus further comprises a mounting portion on which an ink package accommodating the ink is removably mounted and an ink-introducing device which introduces, into said ink-jet printing head, the ink accommodated in said ink package that is mounted on said mounting portion;

and wherein said first ink-introducing step comprises (a) mounting, as said ink package, an initial-use ink package accommodating said first ink, on said mounting portion and (b) introducing said first ink into said ink-jet printing head by said ink-introducing device;

and wherein said second ink-introducing step comprises

(a) mounting, as said ink package, a replacement ink package accommodating said second ink, on said mounting portion, said replacement ink package replacing said ink package which has been mounted on said mounting portion immediately before said replacement ink package is mounted, and (b) introducing said second ink into said ink-jet printing head by said ink-introducing device;

and wherein said initial-use ink package is in a state, before mounting thereof on said mounting portion, in which said initial-use ink package is enclosed such that said first ink in said initial-use ink package maintains said first degree of deaeration which is higher than said second degree of deaeration of said second ink in said replacement ink package.

3. The method according to claim 2, wherein said initial-use ink package is in a state, before mounting thereof on said mounting portion, in which said initial-use ink package is enclosed in a sealing wrapper whose interior space is evacuated to a pressure lower than an atmospheric pressure.

4. The method according to claim 3, wherein said first-ink introducing step further comprises a step of taking said initial-use ink package out of said sealing wrapper before mounting on said mounting portion.

5. The method according to claim 2, wherein said initial-use ink package is in a state, before mounting thereof on

said mounting portion, in which said initial-use ink package is enclosed in a sealing wrapper whose interior space is charged with an inert gas that has a degree of solubility in the ink lower than the air.

6. The method according to claim 5, wherein said first-ink introducing step further comprises a step of taking said initial-use ink package out of said sealing wrapper before mounting on said mounting portion.

7. The method according to claim 5, wherein said inert gas is a helium gas.

8. The method according to claim 2, wherein each of said initial-use ink package and said replacement ink package includes an ink bag whose opposite major surfaces are constituted by a pair of flexible walls, and a rigid ink-bag casing which accommodates said ink bag.

9. An ink-jet recording apparatus comprising an ink-jet printing head having nozzles through which ink is ejected to a recording medium, an ink package in which the ink that is to be introduced into said ink-jet printing head is accommodated, a mounting portion on which said ink package is removably mounted, and an ink-introducing device which introduces, into said ink-jet printing head, the ink that is accommodated in said ink package mounted on said mounting portion, wherein said ink

package comprises an initial-use ink package accommodating a first ink having a first degree of deaeration and a replacement ink package accommodating a second ink having a second degree of deaeration which is lower than said first degree of deaeration, said initial-use ink package and said replacement ink package being selectively mounted on said mounting portion, said initial-use ink package being initially mounted on said mounting portion when said ink-jet printing head is initially used.

10. The ink-jet recording apparatus according to claim 9, wherein said initial-use ink package is in a state, before mounting thereof on said mounting portion, in which said initial-use ink package is enclosed such that said first ink in said initial-use ink package maintains said first degree of deaeration which is higher than said second degree of deaeration of said second ink in said replacement ink package.

11. The ink-jet recording apparatus according to claim 10, wherein said initial-use ink package is in a state, before mounting thereof on said mounting portion, in which said initial-use ink package is enclosed in a sealing wrapper whose interior space is evacuated to a pressure lower than an atmospheric pressure.

12. The ink-jet recording apparatus according to claim 10, wherein said initial-use ink package is in a state, before mounting thereof on said mounting portion, in which said

initial-use ink package is enclosed in a sealing wrapper whose interior space is charged with an inert gas that has a degree of solubility in the ink lower than the air.

13. The ink-jet recording apparatus according to claim 12, wherein said inert gas is a helium gas.

14. The ink-jet recording apparatus according to claim 9, wherein each of said initial-use ink package and said replacement ink package includes an ink bag whose opposite major surfaces are constituted by a pair of flexible walls, and a rigid ink-bag casing which accommodates said ink bag.

15. An ink-package assembly including an ink package accommodating deaerated ink and a sealing wrapper which encloses said ink package and whose interior space is kept in a state that enables said deaerated ink to maintain a degree of deaeration thereof, said ink-package assembly having an indication that said ink package is an initial-use ink package, said initial-use ink package being initially mounted on an ink-jet printing head.

16. The ink-package assembly according to claim 15, wherein said interior space of said sealing wrapper is evacuated to a reduced pressure.

17. The ink-package assembly according to claim 15,

wherein said interior space of said sealing wrapper is charged with an inert gas.

18. The ink-package assembly according to claim 15, wherein said initial-use ink package includes an ink bag whose opposite major surfaces are constituted by a pair of flexible walls, and a rigid ink-bag casing which accommodates said ink bag.

19. An ink-package assembly including an ink package and a wrapper which encloses said ink package and whose interior space is kept at an atmospheric pressure, wherein said ink package assembly has an indication that said ink package is a replacement ink package, said replacement ink package replacing an ink package which has been mounted on an ink-jet printing head immediately before said replacement ink package is mounted on said ink-jet printing head.

20. The ink-package assembly according to claim 19, wherein said replacement ink package includes an ink bag whose opposite major surfaces are constituted by a pair of flexible walls, and a rigid ink-bag casing which accommodates said ink bag.

21. An ink package which is not enclosed in any wrapper and has an indication that said ink package is a replacement ink package, said replacement ink package replacing an ink package which has been mounted on an ink-jet printing head immediately before said replacement ink package

is mounted on said ink-jet printing head.

22. The ink-package assembly according to claim 21, wherein said replacement ink package includes an ink bag whose opposite major surfaces are constituted by a pair of flexible walls, and a rigid ink-bag casing which accommodates said ink bag.